PLANAR

LA1710R/LA1710RTR/LA1710RTC

Open-frame LCD Monitors & Touchscreens

USER'S GUIDE

www.planar.com

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Usage Notice

⚠ **WARNING –** ***To prevent the risk of fire or shock hazards, do not expose this product to rain or moisture.***

⚠ **WARNING –** ***Please do not open or disassemble the product as this may cause electric shock.***

Safety and Use Precautions

Follow all warnings, precautions and maintenance as recommended in this User's Guide to maximize the life of your unit.

Do:

- ❑ Turn off the product before cleaning.
- ❑ Use only a dry soft cloth or clean room wiper when cleaning the LCD panel surface.
- ❑ Use only high quality and safety approved AC/DC power adapter.
- ❑ Disconnect the power plug from AC outlet if the product is not used for a long period of time.

Don't:

- ❑ Do not touch the LCD panel surface with sharp or hard objects.
- ❑ Do not use abrasive cleaners, waxes or solvents for cleaning.
- ❑ Do not operate the product under the following conditions:
  - Extremely hot, cold or humid environment.
  - Areas susceptible to excessive dust and dirt.
  - Near any appliance generating a strong magnetic field.
  - Place in direct sunlight.

Introduction

About Planar's LA1710RTR, LA1710RTC

The LA17 products all have a 17" flat panel screen with an active matrix, thin-film transistor (TFT) liquid crystal display (LCD).

Features include:

- ❑ Dual signal input: Analog VGA and Digital DVI-D
- ❑ Active matrix TFT LCD technology
- ❑ 1280 x 1024 SXGA resolution
- ❑ 17" viewable display area
- ❑ 31.5 ~ 80 kHz horizontal scan
- ❑ 56 ~ 75 Hz refresh rate
- ❑ 0.264mm x 0.264mm pixel pitch
- ❑ 260 cd/m^2 (typ.) brightness
- ❑ 450:1 (typ.) contrast ratio
- ❑ L/R = 70/70, U/D = 70/70 viewing angle, CR=10
- ❑ Tr = 12 ms (typ.)/Tf = 4 ms (typ.) response time
- ❑ 4CCFLs backlights lamps w/50,000 hrs life
- ❑ Auto-adjustment function
- ❑ Multilingual OSD user controls
- ❑ VESA DPMS power saving
- ❑ Durable touchscreen

Touch Screen for LA1710RTR

Resistive for finger and pen interface

- Surface: Anti-glare treatment
- Interface: USB
- Durability: 1,000,000 activations at a single point
- Hardness: 4H per ASTM D3363-92
- Operating force: Stylus - <25 g (average)

  Finger - <50 g (average)
- Transmissirity: 85% + / - 2% (typical)
- Haze: 5%
- Clarity: 80%
- Driver: Windows 95/98/Me/NT/2000/XP

  Linux

Touch Screen for LA1710RTC

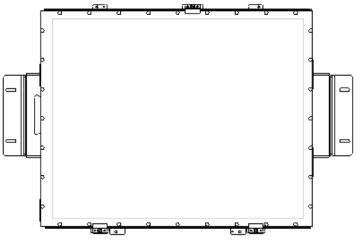
Capacitive for finger interface

- Surface: Anti-glare treatment
- Interface: USB
- Durability: 225,000,000 touches in a single location
- Hardness: Cannot be scratched using any stylus with Mohs' rating of less than 6.5
- Transmissivity: up to 88% at 550 nm
- Driver: Windows® 95/98/Me/NT/2000/XP,

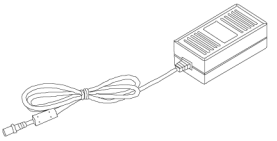
  Linux

  MS HID compatible pointing device

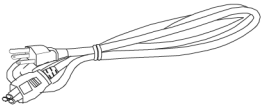
Package Overview



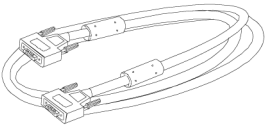
LCD Display



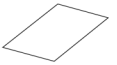
Power Adapter



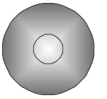
Power Cord



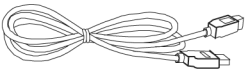
VGA Signal Cable



Landing Strip



Touch Screen Driver
Installation CD-ROM

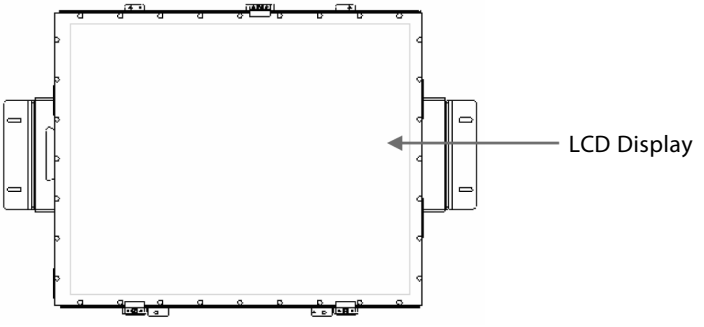


USB Cable

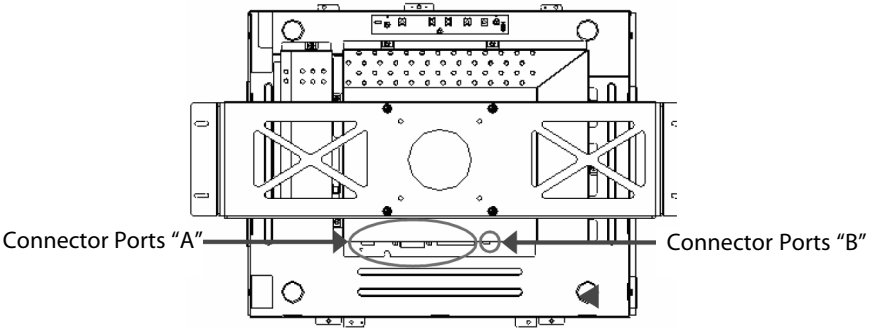
Installation

Product Overview

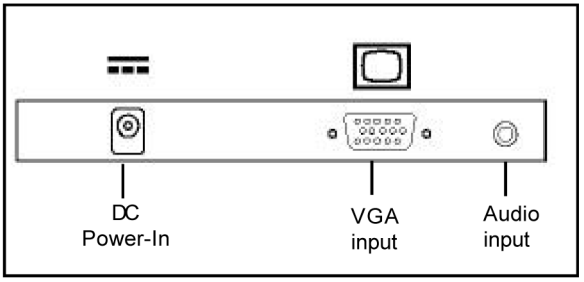
• Front View



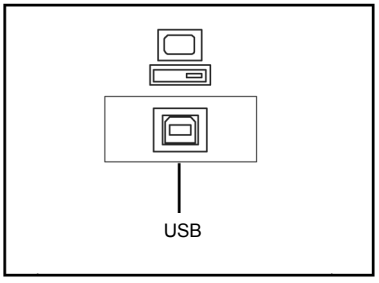
• Rear View



• **Connector Ports "A"**



• **Connector Ports "B"**



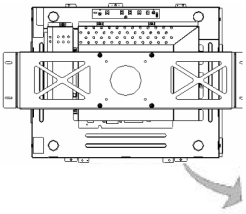
Connecting the display (Figure 1.1)

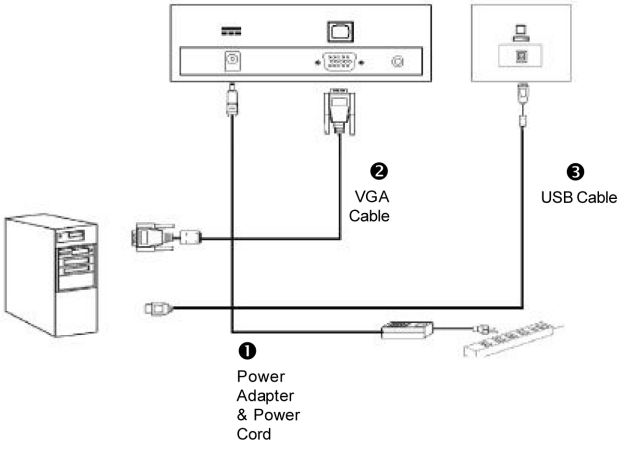
To configure this monitor, please refer to the following figure and procedures.

1. Be sure all equipment is off.
2. Connect the DC power cord to the power connector. Plug one end of the AC power cord into the power adapter, and the other end into an electrical outlet (1.1 ❶).
3. For the PC with Analog output: connect the VGA signal cable from display VGA input connector to the 15-pin connector of your host computer and tighten the screws (1.1 ❷).
4. Connect the USB cable from USB port of your display to the USB port of your computer (1.1 ❸).
5. Turn on your computer, display and video source.

Notice: *To ensure the LCD display works well with your computer, configure the display mode of your graphic card, less than or equal to 1280 x 1024 resolution and make sure the timing of the display mode is compatible with the LCD panel. "Video Modes" of this LCD panel are listed in the appendix for your reference."*

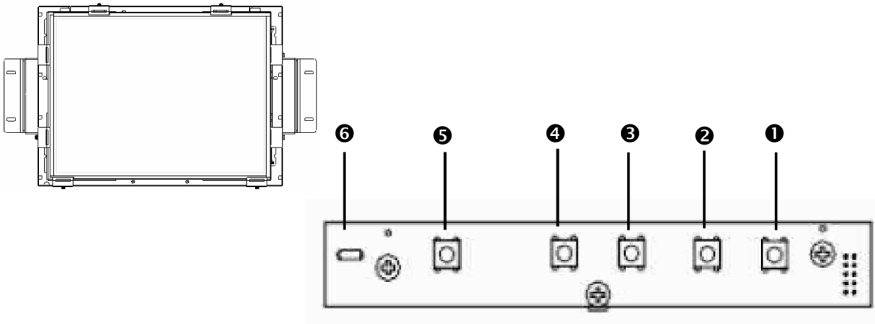
Figure 1.1





User Controls

Front Panel Controls



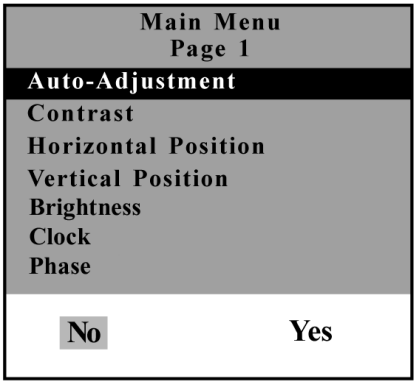
No./ Icon	Control	Function
❶	Menu button	Displays the OSD menus.
❷	Select / Auto	*Select*- To select the adjustment items from OSD menus. *Auto*- To activate the "Auto Adjustment" function to obtain an optimum image.
❸	Brightness Minus / Minus	1. Decreases the brightness of the display image. 2. Decreases value of the adjustment items.
❹	Brightness Plus / Plus	1. Increases the brightness of the display image. 2. Increases value of the adjustment items.
❺	Power Switch	Switches on/off the power of the LCD display.
❻	Power LED	1. Green indicates the display is turned on. 2. Amber indicates the display is in power-saving mode.

How to Use the OSD Menus

1. Press the “Menu” button to pop up the on-screen menu and to select between the four main menus.
2. Choose the adjustment items by pressing the “Select/Auto” button.
3. Adjust the value of the adjustment items by pressing the “ ” button.
4. The OSD menu will automatically close, if you have left it idle for a pre-set time.

On-Screen Display Menus

First OSD Menu:



- ***Auto-Adjustment***

  Choose this function to obtain an optimum image.

- ***Contrast***

  This function allows the user to adjust the image crispness. Contrast adjusts the difference between white and black shades.

- ***Horizontal Position***

  Changes the horizontal position of the image.

- ***Vertical Position***

  Changes the vertical position of the image.

- ***Brightness***

  Adjusts the brightness of the image.

- ***Clock***

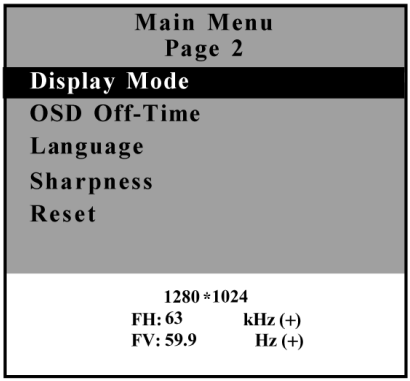
  Changes the display data frequency to match the frequency of your graphic card. When you are experiencing vertical flickering bar, use this function to make an adjustment.

- ***Phase***

  Synchronizes the signal timing of the display to that of the graphic card. When you are experiencing unstable to flickering image, use this function to make an adjustment.

On-Screen Display Menus

Second OSD Menu:



- ***Display Mode***

  Selects this function to view the display resolution, vertical refresh, and horizontal scan of the current mode.

- ***OSD Off-Time***

  Adjusts the time it takes for the OSD menu to disappear.

- ***Language***

  Chooses the language you need.

- ***Sharpness***

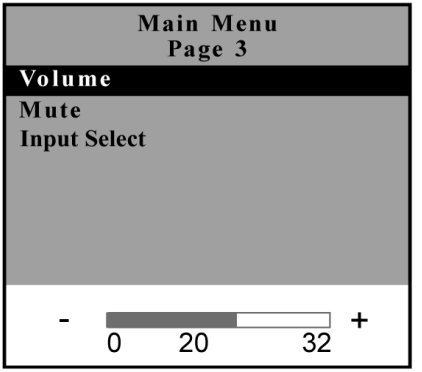
  Adjust the sharpness of the image.

- ***Reset***

  Returns the display parameters of the current mode to the factory default settings.

On-Screen Display Menus

Third OSD Menu:



- ***Volume***

  It allows the sound volume.

- ***Mute***

  It allows you to disable the sound immediately.

- ***Input Select***

  It allows you the chosse the input signal.

On-Screen Display Menus

Fourth OSD Menu:

- ***Color***

  Adjusts the color temperature.

- ***Color Adjustment-Red***

  Adjusts the red color of the display.

- ***Color Adjustment-Green***

  Adjusts the green color of the display.

- ***Color Adjustment-Blue***

  Adjusts the blue color of the display.

Appendix

Troubleshooting

If you are experiencing trouble with the LCD display, refer to the following. If the problem persists, please contact your local dealer or our service center.

Problem: No image appears on screen.

- Check that all the I/O and power connectors are correctly and well connected as described in the "Installation" section.
- Make sure the pins of the connectors are not crooked or broken.

Problem: Partial image or incorrectly displayed the image.

- Check to see if the resolution of your computer is higher than that of the LCD display.
- Reconfigure the resolution of your computer to make it less than or equal to 1280 x 1024.

Problem: Image has flickering vertical line bars.

- Use "Clock" to make an adjustment.
- Check and reconfigure the display mode of the vertical refresh rate of your graphic card to make it compatible with the LCD display.

Problem: Image is unstable and flickering

- Use "Phase" to make an adjustment.

Problem: Image is scrolling

- Check and make sure the VGA signal cable (or adapter) is well connected.
- Check and reconfigure the display mode of the vertical refresh rate of your graphic card to make it compatible with the LCD display.

Problem: Vague image (characters and graphics)

- Use "Clock" to make an adjustment. If this problem still exists, use "Phase" to make an adjustment.

Warning Signal

If you see warning messages on your LCD screen, this means that the LCD display cannot receive a clean signal from the computer graphics card.

There may be two sources for this problem. Please check the cable connections or contact Planar for more information.

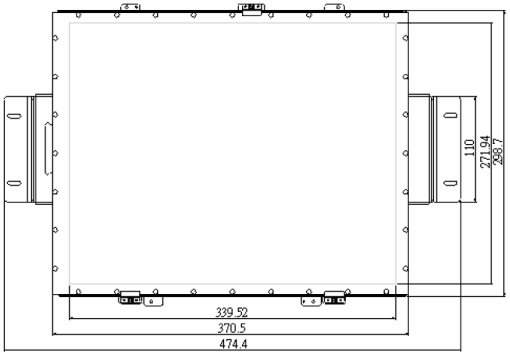
- **No Signal**

  This message means that the LCD display has been powered on but it cannot receive any signal from the computer graphic card. Check all the power switches, power cables, and VGA signal cable.

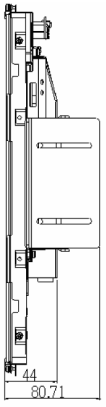
- **Out of Range**

  This message means that the signal of the computer graphic card is not compatible with the LCD display. When the signal is not included in the "Video Modes" list we have listed in the Appendices of this manual, the LCD display will display this message.

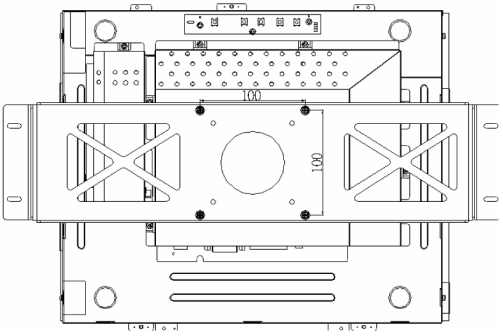
Product Dimensions



Front View



Side View



Rear View

Video Modes

The monitor supports the following industry-standard combinations of screen resolution and refresh rates. Other combinations are possible, but may require adjustments to the image.

For the optimal performance, set your computer to a screen resolution of 1024 x 768 at a 60 Hz refresh rate.

Display Mode		Hsync (kHz)	Vsync (Hz)
VGA	640 x 350	31.5	70
	640 x 480	31.5	60
		37.9	72
		37.5	75
SVGA	800 x 600	35.2	56
		37.9	60
		48.1	72
		46.9	75
XGA	1024 x 768	48.4	60
		56.5	70
		60	75
SXGA	1280 x 1024	64.0	60
		80.0	75
US TEXT	720 x 400	31.5	70
Apple MAC	640 x 480	34.9	67
		35	67
	832 x 624	49.7	75
	1024 x 768	60.2	75

Touch Screen Driver Installation

Driver Installation for LA1710RTR: Resistive Touch Screen with USB Connection

Please note: These monitors are Microsoft Windows® HID(Human Interface Device) compatible. No additional software driver is required for general operation of the touch screen.

A special calibration tool can be installed for improved touch position accuracy. See Optional MicroTouchTM USB HID Calibration Tool version 7.00 Installation Process.

Optional Driver MicroTouch™ USB HID Calibration Tool Version 7.00 Installation Process for LA1710RTR: Resistive Touch Screen with USB Connection

Please note: These monitors are Microsoft HID (Human Interface Device) compatible. The calibration driver is not required for general operation of the touch screen.

This calibration tool is for optimization of touch performance for the touch screen to meet the 1% TPE accuracy specification.

The following Microsoft Windows® operating systems are supported by this software driver: ***Microsoft Windows® 98SE, Me, 2000, and XP***.

1. Open the CD-Rom.
2. Select the PT1500MU Calibration Option link.
3. The driver file will automatically open.
4. Follow the installation instructions for the MicroTouch HID Calibration procedure.

Please read "Readme.txt" located in the unzipped file folder for additional information and assistance.

Driver Installation for LA1710RTC: Capacitive Touch Screen with USB Connection

Touch driver information is located on the enclosed CD-ROM for the following operating systems: ***Microsoft Windows® XP, Windows 2000, Windows NT 4.0, Windows Me, and Windows 9X***.

If you have a USB cable connection disconnect the cable from the monitor or the PC before installing the driver.

1. Open the CD-Rom.
2. Select the link for your monitor model.
3. The driver will automatically open.
4. Select the "TW564SR4.exe file.
5. Select "unzip"
6. Double click the "setup.exe" file.
7. Follow the installation instructions.
8. Reconnect the USB cable
9. If the touch screen driver does not automatically load, restart the computer operating system.

Please read "Readme.txt" located in the unzipped file folder for additional information and assistance.

Linux Driver Installation for LA1710RTC: Capacitive Touch Screen with USB Connection

Touch driver information is located on the enclosed CD-ROM. Supported platforms include: ***Red Hat® Linux 8.0, Red Hat® Linux 9.0, and SuSE® Linux 8.2 and SuSE® Linux 9.0 on Pentium®-compatible CPUs. The following Xfree86 versions are supported: 4. 0.3 and 4.1.0***.

1. Open the CD-Rom.
2. Select the "TwLinux5.62.1" folder.
3. Double click the "Readme.txt" file.
4. Follow the driver selection and installation instructions.

Please read "Readme.txt" located in the unzipped file folder for additional information and assistance.

Planar Systems, Inc.

Customer Service

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Hours: m-f, 8am-9pm, Eastern Time

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12/04

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